

## REMARKS

The foregoing amendment is to place dependent claims into independent form rather than to avoid prior art.

Applicants respectfully request reconsideration of this application as amended. Claims 15-16 and 19-40 are pending in the application; Claims 15-16 and 26-38 are withdrawn by the Examiner from consideration; Claims 19-25 and 39-48 are rejected. Claim 39 is amended to resolve the Examiner's objections.

### Rejected Claims

Claims 19 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,836,621 to Bendelli.

With regard to Claim 19, the Office Action mailed September 17, 2007 claims, without further explanation, that Bragg grating 2 of Figure 1 is distributed.

Applicant respectfully submits Bendelli does not disclose or suggest that Bragg grating 2 of Figure 1 is distributed. Accordingly, in the Office Action mailed September 17, 2007, the Examiner has failed to make a prima facie case of obviousness.

In contrast, the Office Action mailed September 6, 2006, found no disclosure of a distributed Bragg grating in the Sagnac interferometer 5, but instead stated that Bendelli teaches the Bragg gratings define a Fabry-Perot cavity 8 and that tuning can be carried out by means of voltage command.

Applicant has also respectfully submitted that the Fabry-Perot cavity 8 described with regard to Figure 3 is not deployed in a Sagnac interferometer as set forth by Claim 19. Nor is Bendelli's phase control element 7 of Figure 3 coupled with a Sagnac interferometer to control the power of the added or dropped signal.

Further, the Examiner has admitted that Bendelli does not disclose or suggest the use of phase control element 7 to control the power of added or dropped signals as set forth in Claim 19. Instead as a teaching that constructive and destructive interference can be adjusted to control the power of the signal, the Examiner points to paragraph [0026] of Applicant's own specification, which says, "by adjusting the phase of at least one of the two halves of a reflected wavelength channel the power and/or direction of an added or dropped signal may be controlled by adjusting the amount of constructive and destructive interference."

Bendelli, on the other hand, says that the phase control element 7 can be a static phase shift device of appropriate value (col. 4, lines 61-62).

Applicant respectfully submits that without viewing the prior art in retrospect with the aid of appellant's disclosure, no disclosure or suggestion is provided by Bendelli for the subject matter set forth by Claim 19.

Accordingly, Applicant requests the Examiner withdraw the rejection of Claims 19 under 35 U.S.C. 103(a).

With regard to Claim 39-40, the Office Action mailed September 17, 2007 states that Bendelli teaches a Sagnac interferometer with a phase controller but that Bendelli does not disclose a plurality of such Sagnac interferometers. The Examiner further alleges that Applicant has not disclosed how a plurality of Sagnac interferometers interact in a WDM system, or are optically connected to each other.

Applicant respectfully disagrees and points out that, the present specification discloses an example embodiment of variable-reflective tunable optical filters comprising a plurality of Sagnac interferometers optically connected to each other in a WDM system 601 (Fig. 6; pars. 49-52).

Additionally, as stated above, the Examiner has admitted that Bendelli does not disclose or suggest the use of phase control element 7 to control the power of added or dropped signals as set forth in Claim 39.

Accordingly, Applicant requests the Examiner withdraw the rejection of Claims 39-40 under 35 U.S.C. 103(a).

Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bendelli in view of U.S. Patent 4,442,750 to Bowley.

With regard to Claim 20-21, the Office Action mailed September 17, 2007 states that Bendelli teaches a Sagnac interferometer with a phase controller but that Bendelli does not disclose how phase adjustment is accomplished. The Examiner claims that Bowley's phase-modulation techniques would obviously be included into Bendelli by one of skill in the art.

Applicant respectfully submits that it is not clear that Bowley's phase-modulation techniques could or would be used to control the power of add or dropped signals as claimed. For example the phase-modulation techniques of Bowley involve plucking a fiber optic cable to cause vibrations, sometimes in a particular field (Figs. 5-8; col. 10 line 29 through col. 11, line 11).

Applicant respectfully submits that even if the Sagnac interferometer of Bendelli could be mechanically made to vibrate, it is not obvious how to control the power of add or dropped signals through such techniques.

Accordingly, Applicant requests the Examiner withdraw the rejection of Claims 20-21 under 35 U.S.C. 103(a).

Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bendelli in view of U.S. Patent 4,898,468 to Udd.

With regard to Claim 22-25, the Office Action mailed September 17, 2007 states that Bendelli teaches a Sagnac interferometer with a phase controller but that Bendelli does not disclose a frequency adjustment circuit.

Applicant believes that the dependant claims are also allowable at least due to their dependence from a patentable independent claim. The Examiner claims that Udd's frequency shifter would obviously be included into Bendelli by one of skill in the art

because by comparing the output of the system with the frequency shifter switched “off” and “on” the location and magnitude of a disturbance may be deduced.

Applicant respectfully submits that even if the Sagnac interferometer of Bendelli were provided with the frequency shifter of Udd to determine the location and magnitude of a disturbance, it is not obvious how comparing the output of the system with the frequency shifter of Udd switched “off” and “on” can be used to tune the frequency of add or dropped signals as claimed.

Accordingly, Applicant requests the Examiner withdraw the rejection of Claims 22-25 under 35 U.S.C. 103(a).

Therefore, Applicant believes that Claims 15-16 and 19-40 are presently in condition for allowance and such action is earnestly solicited.

#### CONCLUSION

Applicants respectfully submit the present claims for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Lawrence Mennemeier at (408) 765-2194.

Authorization is hereby given to charge our Deposit Account No. 50-0221 for any charges that may be due.

Respectfully submitted,

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